

Enter an option number to view information or to connect to an online service. Enter a BEGIN command plus a file number to search a database (e.g., B1 for ERIC).  
? b biosci

16nov04 17:04:01 User276677 Session D10.1  
\$0.00 0.206 DialUnits FileHomeBase  
\$0.00 Estimated cost FileHomeBase  
\$0.03 TELNET  
\$0.03 Estimated cost this search  
\$0.03 Estimated total session cost 0.206 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5: Biosis Previews(R) 1969-2004/Nov W1  
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(c) 2004 Elsevier Science B.V.  
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(c) 2004 Elsevier Science B.V.  
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2001 (c) Action Potential  
File 94: JICST-EPlus 1985-2004/Oct W3  
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(c) 2004 The HW Wilson Co.  
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(c) 2002 AEA Techn Env.  
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File 135: NewsRx Weekly Reports 1995-2004/Nov W1  
(c) 2004 NewsRx  
**\*File 135: New newsletters are now added. See Help News135 for the complete list of newsletters.**  
File 143: Biol. & Agric. Index 1983-2004/Aug  
(c) 2004 The HW Wilson Co  
File 144: Pascal 1973-2004/Nov W1  
(c) 2004 INIST/CNRS  
File 155: MEDLINE(R) 1951-2004/Nov W2  
(c) format only 2004 The Dialog Corp.  
**\*File 155: Medline will stop updating COMPLETED records on November 17, 2004. Please see HELP NEWS 155 for details.**  
File 164: Allied & Complementary Medicine 1984-2004/Nov  
(c) 2004 BLHCIS  
File 172: EMBASE Alert 2004/Nov W1  
(c) 2004 Elsevier Science B.V.  
File 185: Zoological Record Online(R) 1978-2004/Oct (c) 2004 BIOSIS.  
**\*File 185: File 185 has been reloaded. All accession**

numbers have changed. See HELP NEWS185.

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(c) 2004 Thomson Derwent & ISI

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(c) 2004 Reed Business Information Ltd.

File 370:Science 1996-1999/Jul W3

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**\*File 370: This file is closed (no updates). Use File 47 for more current**

information.

File 391:Beilstein Reactions July 2004

(c) 2004 Beilstein GmbH

File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec

(c) 1998 Inst for Sci Info

File 467:ExtraMED(tm) 2000/Dec

(c) 2001 Informania Ltd.

**\*File 467: F467 no longer updates; see Help News467.**

7.

Set	Items	Description
---	-----	-----
? s	beta-N-methylamino-L-alanine	
S1	85	BETA-N-METHYLAMINO-L-ALANINE
? s	alzheim? or amyloi?	
	292575	ALZHEIM?
	179783	AMYLOI?
S2	398914	ALZHEIM? OR AMYLOI?
? s	s1 and s2	
	85	S1
	398914	S2
S3	8	S1 AND S2
? t	s3/3,k/all	

3/3,K/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0006332729 BIOSIS NO.: 198936041620

NEURODEGENERATIVE NEUROTOXINS AND DISEASES OF THE BASAL GANGLIA

BOOK TITLE: SINGER, T. P., N. CASTAGNOLI AND C. C. WANG (ED.).

MOLECULAR

BASIS OF THE ACTION OF DRUGS AND TOXIC SUBSTANCES; INTERNATIONAL

SYMPOSIUM, SAN FRANCISCO, CALIFORNIA, USA, APRIL 23-26, 1987. X+248P.

WALTER DE GRUYTER AND CO.: BERLIN, WEST GERMANY; NEW YORK, NEW YORK, USA.

1ILLUS

AUTHOR: LANGSTON J W (Reprint)

AUTHOR ADDRESS: INST MED RES, 2260 CLOVE DRIVE, SAN JOSE, CALIF, USA  
95128

\*\*USA

p1-13 1988

ISBN: 3-11-011290-6; 0-89925-350-4

DOCUMENT TYPE: Book; Meeting

RECORD TYPE: Citation

LANGUAGE: ENGLISH

...REGISTRY NUMBERS: BETA-N-METHYLAMINO-L-ALANINE

...DESCRIPTORS: BETA-N METHYLAMINO-L-ALANINE 1 METHYL-4-PHENYL-1 2 3  
6-TETRAHYDROPYRIDINE DEMENTIA **ALZHEIMER** 'S DISEASE PARKINSON'S DISEASE  
HUNTINGTON'S CHOREA STRIATONIGRAL DEGENERATION  
DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... **BETA-N-METHYLAMINO-L-ALANINE**

**3/3,K/2 (Item 2 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0005873611 BIOSIS NO.: 198834102502

**AMYOTROPHIC LATERAL SCLEROSIS AND PARKINSON'S DISEASE COMPLEX ON GUAM  
LINKED TO AN ENVIRONMENTAL NEUROTOXIN**

AUTHOR: KURLAND L T (Reprint)

AUTHOR ADDRESS: DEP HEALTH SCI RES, MAYO CLIN AND MAYO FOUND,  
ROCHESTER, MN

55905, USA\*\*USA

JOURNAL: Trends in Neurosciences 11 (2): p51-54 1988

ISSN: 0166-2236

DOCUMENT TYPE: Article

RECORD TYPE: Citation

LANGUAGE: ENGLISH

...REGISTRY NUMBERS: **BETA-N-METHYLAMINO-L-ALANINE**

DESCRIPTORS: CYCAS-CIRCINALIS HUMAN CYCASIN BETA-N METHYLAMINO-L-  
ALANINE

**ALZHEIMER** 'S DISEASE FOOD MEDICINE

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... **BETA-N-METHYLAMINO-L-ALANINE**

**3/3,K/3 (Item 3 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0005725226 BIOSIS NO.: 198784079375

**GUAM AMYOTROPHIC LATERAL SCLEROSIS-PARKINSONISM-DEMENTIA LINKED TO A  
PLANT**

**EXCITANT NEUROTOXIN**

AUTHOR: SPENCER P S (Reprint); NUNN P B; HUGON J; LUDOLPH A C; ROSS S  
M;

ROY D N; ROBERTSON R C

AUTHOR ADDRESS: INST NEUROTOXICOL, DEP NEUROSCI NEUROL PATHOL, ALBERT  
EINSTEIN COLL MED, 1300 MORRIS PARK AVE, BRONX, NY 10461, USA\*\*USA

JOURNAL: Science (Washington D C) 237 (4814): p517-522 1987

ISSN: 0036-8075

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

ABSTRACT: The decline in the high incidence of amyotrophic lateral  
sclerosis, parkinsonism, and **Alzheimer** -type dementia among the  
Chamorro

population of the western Pacific islands of Guam and Rota...

...REGISTRY NUMBERS: **BETA-N-METHYLAMINO-L-ALANINE**

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS:     **BETA-N-METHYLAMINO-L-ALANINE**

**3/3,K/4**        **(Item 4 from file: 5)**  
DIALOG(R)File    5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0005495936    BIOSIS NO.: 198733102541  
**PRIMATE MOTOR-SYSTEM DISEASE INDUCED BY THE CYCAD NEUROTOXIN BETA-N  
METHYLAMINO-L-ALANINE BMAA**  
AUTHOR: SPENCER P S (Reprint); NUNN P B; HUGON J; LUDOLPH A C;  
ROBERTSON R  
C; ROSS S M; ROY D J  
AUTHOR ADDRESS: ALBERT EINSTEIN COLL MED, NEW YORK, USA\*\*USA  
JOURNAL: Neuroscience 22 (SUPPL): pS292 1987  
CONFERENCE/MEETING: SECOND WORLD CONGRESS OF NEUROSCIENCE, BUDAPEST,  
HUNGARY, AUGUST 16-21, 1987. NEUROSCIENCE.  
ISSN: 0306-4522  
DOCUMENT TYPE: Meeting  
RECORD TYPE: Citation  
LANGUAGE: ENGLISH

...REGISTRY NUMBERS:   **BETA-N-METHYLAMINO-L-ALANINE**  
DESCRIPTORS: ABSTRACT HUMAN MACACA N METHYL-D-ASPARTATE AGONIST AP7  
PARKINSONISM   **ALZHEIMER 'S DISEASE**  
DESCRIPTORS:  
CHEMICALS & BIOCHEMICALS:     **BETA-N-METHYLAMINO-L-ALANINE**

**3/3,K/5**        **(Item 1 from file: 34)**  
DIALOG(R)File    34:SciSearch(R) Cited Ref Sci  
(c) 2004 Inst for Sci Info. All rts. reserv.

11052220    Genuine Article#: 601GR    No. References: 56  
**Title: The cycad neurotoxic amino acid, beta-N-methylamino-L-alanine  
(BMAA), elevates intracellular calcium levels in dissociated rat  
brain  
cells**  
Author(s): Brownson DM; Mabry TJ (REPRINT) ; Leslie SW  
Corporate Source: Univ Texas,Sch Biol Sci, Dept Bot,Austin//TX/78712  
(REPRINT); Univ Texas,Sch Biol Sci, Dept Bot,Austin//TX/78712; Univ  
Texas,Coll Pharm, Div Pharmacol & Toxicol,Austin//TX/78712; Univ  
Texas,Inst Neurosci,Austin//TX/78712  
Journal: JOURNAL OF ETHNOPHARMACOLOGY, 2002, V82, N2-3 (OCT), P159-167  
ISSN: 0378-8741    Publication date: 20021000  
Publisher: ELSEVIER SCI IRELAND LTD, CUSTOMER RELATIONS MANAGER, BAY  
15,  
SHANNON INDUSTRIAL ESTATE CO, CLARE, IRELAND  
Language: English    Document Type: ARTICLE    (ABSTRACT AVAILABLE)

...Abstract: is a complex of amyotrophic lateral sclerosis and  
parkinsonism  
dementia complex with additional symptoms of **Alzheimer 's**. It is  
well  
known that Ca2+ elevations in brain cells can lead to cell...

3/3,K/6 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

06133404 Genuine Article#: XX057 No. References: 55

**Title: The dietary excitotoxins beta-N-methylamino-L-alanine and  
beta-N-oxalylamino-L-alanine induce necrotic- and apoptotic-like  
death  
of rat cerebellar granule cells**

Author(s): Staton PC; Bristow DR (REPRINT)

Corporate Source: UNIV MANCHESTER, SCH BIOL SCI, DIV NEUROSCI, 1-124  
STOPFORD BLDG/MANCHESTER M13 9PT/LANCS/ENGLAND/ (REPRINT); UNIV  
MANCHESTER, SCH BIOL SCI, DIV NEUROSCI/MANCHESTER M13  
9PT/LANCS/ENGLAND/

Journal: JOURNAL OF NEUROCHEMISTRY, 1997, V69, N4 (OCT), P1508-1518

ISSN: 0022-3042 Publication date: 19971000

Publisher: LIPPINCOTT-RAVEN PUBL, 227 EAST WASHINGTON SQ, PHILADELPHIA,  
PA

19106

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Research Fronts: APOPTOTIC BODIES)

95-4227 001 (ACTIVATION OF METABOTROPIC GLUTAMATE RECEPTORS  
PROTECTS

CULTURED NEURONS; APOPTOSIS IN **ALZHEIMERS** -DISEASE; RAT CORTEX)

3/3,K/7 (Item 1 from file: 71)

DIALOG(R)File 71:ELSEVIER BIOBASE

(c) 2004 Elsevier Science B.V. All rts. reserv.

02182266 2002262257

**The cycad neurotoxic amino acid, beta-N-methylamino-L-alanine (EMAA),  
elevates intracellular calcium levels in dissociated rat brain cells**

Brownson D.M.; Mabry T.J.; Leslie S.W.

ADDRESS: T.J. Mabry, Department of Botany, School of Biological  
Sciences,

University of Texas, Austin, TX 78712, United States

EMAIL: mabry@mail.utexas.edu

Journal: Journal of Ethnopharmacology, 82/2-3 (159-167), 2002, Ireland

CODEN: JOETD

ISSN: 0378-8741

PUBLISHER ITEM IDENTIFIER: S0378874102001708

DOCUMENT TYPE: Article

LANGUAGES: English SUMMARY LANGUAGES: English

NO. OF REFERENCES: 56

...is a complex of amyotrophic lateral sclerosis and parkinsonism  
dementia

complex with additional symptoms of **Alzheimer** 's. It is well known  
that

CaSUP2+ elevations in brain cells can lead to cell...

DESCRIPTORS:

**beta-N-Methylamino-L-alanine** ; Excitatory amino acids; Neurotoxicity;  
Fura-2 dye; Calcium; Amyotrophic lateral sclerosis...

3/3,K/8 (Item 1 from file: 434)

DIALOG(R)File 434:SciSearch(R) Cited Ref Sci  
(c) 1998 Inst for Sci Info. All rts. reserv.

09708816 Genuine Article#: AP852 No. References: 37

Title: **NEUROTOXICITY OF BETA-N-METHYLAMINO-L-ALANINE (BMAA) AND  
BETA-N-OXALYLAMINO-L-ALANINE (BOAA) ON CULTURED CORTICAL-NEURONS**

Author(s): WEISS JH; KOH JY; CHOI DW

Corporate Source: STANFORD UNIV,MED CTR,DEPT NEUROL/STANFORD//CA/94305

Journal: BRAIN RESEARCH, 1989, V497, N1, P64-71

Language: ENGLISH Document Type: ARTICLE

...Research Fronts: D-ASPARTATE; LONG-TERM POTENTIATION)

87-1103 001 (NUCLEUS BASALIS MAGNOCELLULARIS CHOLINERGIC NEURONS;  
PLAQUES OF **ALZHEIMERS** -DISEASE; RAT CEREBRAL-CORTEX CAUSES  
DEFICITS IN

PASSIVE-AVOIDANCE LEARNING)

87-3668 001 (UPTAKE OF...

? t s3/9

3/9/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0006332729 BIOSIS NO.: 198936041620

**NEURODEGENERATIVE NEUROTOXINS AND DISEASES OF THE BASAL GANGLIA**

BOOK TITLE: SINGER, T. P., N. CASTAGNOLI AND C. C. WANG (ED.).

**MOLECULAR**

**BASIS OF THE ACTION OF DRUGS AND TOXIC SUBSTANCES; INTERNATIONAL  
SYMPOSIUM, SAN FRANCISCO, CALIFORNIA, USA, APRIL 23-26, 1987. X+248P.  
WALTER DE GRUYTER AND CO.: BERLIN, WEST GERMANY; NEW YORK, NEW YORK,  
USA.**

ILLUS

AUTHOR: LANGSTON J W (Reprint)

AUTHOR ADDRESS: INST MED RES, 2260 CLOVE DRIVE, SAN JOSE, CALIF, USA  
95128

\*\*USA

p1-13 1988

ISBN: 3-11-011290-6; 0-89925-350-4

DOCUMENT TYPE: Book; Meeting

RECORD TYPE: Citation

LANGUAGE: ENGLISH

REGISTRY NUMBERS: 89-00-9: QUINOLINIC ACID; 15920-93-1:

**BETA-N-METHYLAMINO-L-ALANINE** ; 28289-54-5: 1-METHYL-4-PHENYL-1 2 3  
6-TETRAHYDROPYRIDINE

DESCRIPTORS: REVIEW HUMAN ANIMAL NEURON LOCUS CERULEUS INCLUSION BODY  
QUINOLINIC ACID EXCITATORY AMINO ACIDS BETA-N METHYLAMINO-L-ALANINE 1  
METHYL-4-PHENYL-1 2 3 6-TETRAHYDROPYRIDINE DEMENTIA **ALZHEIMER** 'S  
DISEASE

PARKINSON'S DISEASE HUNTINGTON'S CHOREA STRIATONIGRAL DEGENERATION  
DESCRIPTORS:

MAJOR CONCEPTS: Behavior; Genetics; Geriatrics--Human Medicine,  
Medical

Sciences; Human Ecology--Anthropology; Neurology--Human Medicine,  
Medical Sciences; Pharmacology; Psychiatry--Human Medicine, Medical  
Sciences; Toxicology

BIOSYSTEMATIC NAMES: Animalia--Animalia; Hominidae--Primates,

Mammalia,  
Vertebrata, Chordata, Animalia  
COMMON TAXONOMIC TERMS: Animals; Chordates; Humans; Mammals;  
Primates;  
Vertebrates  
CHEMICALS & BIOCHEMICALS: QUINOLINIC ACID;  
**BETA-N-METHYLAMINO-L-ALANINE** ; 1-METHYL-4-PHENYL-1 2 3  
6-TETRAHYDROPYRIDINE

? s rn=15920-93-1  
>>>One or more prefixes are unsupported  
>>> or undefined in one or more files.  
S1 86 RN=15920-93-1

? ds

Set	Items	Description
S1	86	RN=15920-93-1

? s amyloi?

S2 230557 AMYLOI?

? s s1 and s2

86 S1

230557 S2

S3 0 S1 AND S2

? s alzheimer?

S4 375969 ALZHEIM?

? s s1 and s4

86 S1

375969 S4

S5 4 S1 AND S4

? t s5/3,k/all

5/3,K/1 (Item 1 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0006332729 BIOSIS NO.: 198936041620

NEURODEGENERATIVE NEUROTOXINS AND DISEASES OF THE BASAL GANGLIA

BOOK TITLE: SINGER, T. P., N. CASTAGNOLI AND C. C. WANG (ED.).

MOLECULAR

BASIS OF THE ACTION OF DRUGS AND TOXIC SUBSTANCES; INTERNATIONAL  
SYMPOSIUM, SAN FRANCISCO, CALIFORNIA, USA, APRIL 23-26, 1987. X+248P.

WALTER DE GRUYTER AND CO.: BERLIN, WEST GERMANY; NEW YORK, NEW YORK,  
USA.

1ILLUS

AUTHOR: LANGSTON J W (Reprint)

AUTHOR ADDRESS: INST MED RES, 2260 CLOVE DRIVE, SAN JOSE, CALIF, USA  
95128

\*\*USA

p1-13 1988

ISBN: 3-11-011290-6; 0-89925-350-4

DOCUMENT TYPE: Book; Meeting

RECORD TYPE: Citation

LANGUAGE: ENGLISH

...REGISTRY NUMBERS: 15920-93-1

...DESCRIPTORS: BETA-N METHYLAMINO-L-ALANINE 1 METHYL-4-PHENYL-1 2 3

6-TETRAHYDROPYRIDINE DEMENTIA ALZHEIMER 'S DISEASE PARKINSON'S DISEASE

HUNTINGTON'S CHOREA STRIATONIGRAL DEGENERATION

5/3,K/2 (Item 2 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)  
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0005873611 BIOSIS NO.: 198834102502

**AMYOTROPHIC LATERAL SCLEROSIS AND PARKINSON'S DISEASE COMPLEX ON GUAM  
LINKED TO AN ENVIRONMENTAL NEUROTOXIN**

AUTHOR: KURLAND L T (Reprint)

AUTHOR ADDRESS: DEP HEALTH SCI RES, MAYO CLIN AND MAYO FOUND,  
ROCHESTER, MN

55905, USA\*\*USA

JOURNAL: Trends in Neurosciences 11 (2): p51-54 1988

ISSN: 0166-2236

DOCUMENT TYPE: Article

RECORD TYPE: Citation

LANGUAGE: ENGLISH

...REGISTRY NUMBERS: 15920-93-1

DESCRIPTORS: CYCAS-CIRCINALIS HUMAN CYCASIN BETA-N METHYLAMINO-L-  
ALANINE

**ALZHEIMER 'S DISEASE FOOD MEDICINE**

5/3,K/3 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0005725226 BIOSIS NO.: 198784079375

**GUAM AMYOTROPHIC LATERAL SCLEROSIS-PARKINSONISM-DEMENTIA LINKED TO A  
PLANT**

**EXCITANT NEUROTOXIN**

AUTHOR: SPENCER P S (Reprint); NUNN P B; HUGON J; LUDOLPH A C; ROSS S  
M;

ROY D N; ROBERTSON R C

AUTHOR ADDRESS: INST NEUROTOXICOL, DEP NEUROSCI NEUROL PATHOL, ALBERT  
EINSTEIN COLL MED, 1300 MORRIS PARK AVE, BRONX, NY 10461, USA\*\*USA

JOURNAL: Science (Washington D C) 237 (4814): p517-522 1987

ISSN: 0036-8075

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

ABSTRACT: The decline in the high incidence of amyotrophic lateral  
sclerosis, parkinsonism, and **Alzheimer** -type dementia among the  
Chamorro

population of the western Pacific islands of Guam and Rota...

REGISTRY NUMBERS: 15920-93-1 ...

5/3,K/4 (Item 4 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0005495936 BIOSIS NO.: 198733102541



**PRIMATE MOTOR-SYSTEM DISEASE INDUCED BY THE CYCAD NEUROTOXIN BETA-N  
METHYLAMINO-L-ALANINE BMAA**

AUTHOR: SPENCER P S (Reprint); NUNN P B; HUGON J; LUDOLPH A C;  
ROBERTSON R

C; ROSS S M; ROY D J

AUTHOR ADDRESS: ALBERT EINSTEIN COLL MED, NEW YORK, USA\*\*USA

JOURNAL: Neuroscience 22 (SUPPL): pS292 1987

CONFERENCE/MEETING: SECOND WORLD CONGRESS OF NEUROSCIENCE, BUDAPEST,  
HUNGARY, AUGUST 16-21, 1987. NEUROSCIENCE.

ISSN: 0306-4522

DOCUMENT TYPE: Meeting

RECORD TYPE: Citation

LANGUAGE: ENGLISH

REGISTRY NUMBERS: 15920-93-1 ...

DESCRIPTORS: ABSTRACT HUMAN MACACA N METHYL-D-ASPARTATE AGONIST AP7  
PARKINSONISM **ALZHEIMER** 'S DISEASE

S8 11 RD (unique items)  
? t s8/3,k/all

8/3,K/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0014835315 BIOSIS NO.: 200400202948

**Cholesterol beta - D - Glucoside: a novel putative causal factor in ALS**

-

**PDC.**

AUTHOR: Khabazian I (Reprint); Kyu Ryu J; Nagai A; Kim S U; Shaw C A  
(Reprint)

AUTHOR ADDRESS: Dept. Ophthalmol, Univ. British Columbia, Vancouver, BC,  
Canada\*\*Canada

JOURNAL: Society for Neuroscience Abstract Viewer and Itinerary Planner  
2003 pAbstract No. 630.14 2003 2003

MEDIUM: e-file

CONFERENCE/MEETING: 33rd Annual Meeting of the Society of Neuroscience  
New

Orleans, LA, USA November 08-12, 2003; 20031108

SPONSOR: Society of Neuroscience

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: disease to the environmental toxins in the seeds of *Cycas  
circinalis* (1). Extracted toxins from **cycad** flour on cortical  
slices in  
an in vitro preparation led to glutamate release and cell death (2,  
3).

Mice fed with **cycad** flour showed both cognitive and motor deficits  
resembling ALS-PDC (4). The extracted toxins were...

...their growth and morphology. Fluorescent immunocytochemical labeling  
against cytosolic proteins Caspase-3, HSP-70, PHF- **Tau** , and  
GLT-1betawere measured in relation to time and to each other. We also  
assessed...

...and stands in the opposite side of the spectrum. The expression of GLT-1beta and PHF- **Tau** seem to take place somewhere in between activation time of HSP-70 and Caspase-3...

8/3,K/2 (Item 2 from file: 5)  
DIALOG(R) File 5: Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0013390433 BIOSIS NO.: 200100562272

**Histological assessment of cytotoxicity due to cycad feeding in mice:  
Implications for ALS-PDC**

AUTHOR: Wilson J M B (Reprint); Wong M C; Seyedalikhani A (Reprint);  
Pasqualotto B A; Shaw C A

AUTHOR ADDRESS: Psychology, University of British Columbia, Vancouver,  
BC,  
Canada\*\*Canada

JOURNAL: Society for Neuroscience Abstracts 27 (2): p1735 2001 2001

MEDIUM: print

CONFERENCE/MEETING: 31st Annual Meeting of the Society for Neuroscience  
San Diego, California, USA November 10-15, 2001; 20011110

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract

LANGUAGE: English

**Histological assessment of cytotoxicity due to cycad feeding in mice:  
Implications for ALS-PDC**

ABSTRACT: Consumption of **cycad** seed products (*Cycas circinalis*) has been

implicated as a causative factor to the Guamanian neurological disorder,

ALS-PDC. Using in vitro rat cortical slice assays, we demonstrated that

washed **cycad** contains a cytotoxic sterol glucoside; this molecule causes glutamate release leading to activation of NMDA...

...In vivo studies in mice have shown cognitive and motor behavioural deficits following consumption of **cycad** flour (Wilson et al.,

2001). We

performed a series of histological studies designed to link...

...vitro toxicity to in vivo evidence of CNS dysfunction. Adult male mice

were fed washed **cycad** flour then sacrificed following 7 weeks of behavioural testing. TUNEL, caspase-3, HSP-70 and **tau** assays were performed in search for evidence of neurodegeneration. Anti- **tau** immunolabeling (cortex and hippocampus) was 2X more abundant in **cycad**

fed-mice. In **cycad** -fed mice, TUNEL labeled cells were found in cortex,

hippocampus, spinal cord and substantia nigra...

...regions of CNS. Anti-activated Caspase-3 immunostaining was found in

the

SN of one **cycad** -fed animal. These findings support the view that the

cytotoxic effects of **cycad** flour is the basis of the behavioral deficits observed in **cycad** -fed mice and the hypothesis that the etiology of Guamanian ALS-PDC involves ingestion of a toxin in **cycad** flour.

DESCRIPTORS:

MISCELLANEOUS TERMS: **cycad** flour...

**8/3,K/3 (Item 3 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

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0011881607 BIOSIS NO.: 199900141267

**The Guam cycad toxin methylazoxymethanol damages neuronal DNA and modulates Tau mRNA expression and excitotoxicity**

AUTHOR: Esclaire Françoise (Reprint); Kisby Glen; Spencer Peter; Milne John

; Lesort Mathieu (Reprint); Hugon Jacques (Reprint)

AUTHOR ADDRESS: Dep. Histol. Cell. Biol., ERS CNRS 6101, Fac. Med., Univ.

Limoges, 87025 Limoges, France\*\*France

JOURNAL: Experimental Neurology 155 (1): p11-21 Jan., 1999 1999

MEDIUM: print

ISSN: 0014-4886

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

**The Guam cycad toxin methylazoxymethanol damages neuronal DNA and modulates Tau mRNA expression and excitotoxicity**

...ABSTRACT: sclerosis (ALS) and Parkinsonism-dementia complex (PDC) contain intraneuronal-pairedhelical filaments composed of accumulated phosphorylated **tau** protein. **Tau** mRNA expression in rat neuronal cultures-normally modulated by glutamate-increases after treatment with

the aglycone of cycasin, a **cycad** -derived toxin whose concentration in

Chamorro food varies with disease incidence. Elevated **Tau** gene expression in vitro is coincident with increased cycasin-related DNA adducts and reduced DNA repair. Cycasin and endogenous glutamate may together promote the accumulation of **tau** protein and neuronal degeneration in Western Pacific ALS/PDC.

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... **cycad** toxin...

... **tau** messenger RNA...

... **tau** protein

**8/3,K/4 (Item 4 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0011821471 BIOSIS NO.: 199900081131

**Up-regulation of neuronal tau mRNA expression by the guam cycad neurotoxin MAM and glutamate**

AUTHOR: Esclaïre F (Reprint); Kisby G E; Lesort M (Reprint); Spencer P S;

Hugon J (Reprint)

AUTHOR ADDRESS: Neurobiol. Cell Pathol. Unit, Histol. Cell Biol. Dep., Fac.

Med., Univ. Limoges, 87025 Limoges, France\*\*France

JOURNAL: Society for Neuroscience Abstracts 24 (1-2): p1717 1998 1998

MEDIUM: print

CONFERENCE/MEETING: 28th Annual Meeting of the Society for Neuroscience,

Part 2 Los Angeles, California, USA November 7-12, 1998; 19981107

SPONSOR: Society for Neuroscience

ISSN: 0190-5295

DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster

RECORD TYPE: Citation

LANGUAGE: English

**Up-regulation of neuronal tau mRNA expression by the guam cycad neurotoxin MAM and glutamate**

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ... tau protein

8/3,K/5 (Item 5 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

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0010355023 BIOSIS NO.: 199698822856

**Substrate specificity and transglucosylation catalyzed by cycad beta-glucosidase**

AUTHOR: Yagi Fumio (Reprint); Tadera Kenjiro

AUTHOR ADDRESS: Biochemistry Biotechnol., Fac. Agric., Kagoshima Univ., 1-21-24 Korimoto, Kagoshima 890, Japan\*\*Japan

JOURNAL: Biochimica et Biophysica Acta 1289 (3): p315-321 1996 1996

ISSN: 0006-3002

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

**Substrate specificity and transglucosylation catalyzed by cycad beta-glucosidase**

ABSTRACT: Initial rates of transglucosylation with diglucosides and diglucose-azoxyglycosides as acceptor by **cycad** beta-glucosidase were

tentatively obtained. The formation of beta-1,3 glucosidic linkage was

predominant, except for neocycasin A ( **beta** -laminaribioside of methylazoxymethanol, MAM) as an acceptor. With neocycasin A as an acceptor, beta-1...

8/3,K/6 (Item 6 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0009824657 BIOSIS NO.: 199598292490

**The cycad toxin MAM enhances neuronal tau mRNA expression produced by glutamate**

AUTHOR: Esclaire F (Reprint); Kisby G E; Sindou P (Reprint); Lesort M (Reprint); Sweatt C; Spencer P S; Hugon J (Reprint)  
AUTHOR ADDRESS: Cellular Neurobiol. Unit, Histol. Lab., Fac. Med., Univ.  
Limoges, 87025 Limoges, France\*\*France

JOURNAL: Journal of Cellular Biochemistry Supplement 0 (21B): p97 1995 1995

CONFERENCE/MEETING: Keystone Symposium on the Molecular and Cellular Basis of Human Neurodegenerative Disease Breckenridge, Colorado, USA April 3-9, 1995; 19950403

ISSN: 0733-1959

DOCUMENT TYPE: Meeting; Meeting Abstract; Meeting Poster

RECORD TYPE: Citation

LANGUAGE: English

**The cycad toxin MAM enhances neuronal tau mRNA expression produced by glutamate**

8/3,K/7 (Item 7 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0005112374 BIOSIS NO.: 198681076265

**FORMATION OF THREE NEW TRISACCHARIDE-AZOXYGLYCOSIDES BY TRANSGLUCOSYLATION**

**BY CYCAD BETA GLUCOSIDASE**

AUTHOR: YAGI F (Reprint); TADERA K; KOBAYASHI A  
AUTHOR ADDRESS: LABORATORY BIOCHEMISTRY AND NUTRITIONAL CHEMISTRY, FACULTY

AGRICULTURE, KAGOSHIMA UNIVERSITY, KAGOSHIMA 890, JAPAN\*\*JAPAN  
JOURNAL: Agricultural and Biological Chemistry 49 (10): p2985-2990 1985

ISSN: 0002-1369

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: ENGLISH

**FORMATION OF THREE NEW TRISACCHARIDE-AZOXYGLYCOSIDES BY TRANSGLUCOSYLATION**

**BY CYCAD BETA GLUCOSIDASE**

ABSTRACT: Three new trisaccharide-azoxyglucosides were formed from some azoxyglycocides by transglucosylation by a . **beta** .-D-glucosidase from

**cycad** seeds. These azoxyglycosides, named neocycasin H, I, and J, were

identified as O-.beta.-D...

8/3,K/8 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

11052220 Genuine Article#: 601GR No. References: 56

**Title: The cycad neurotoxic amino acid, beta-N-methylamino-L-alanine (BMAA), elevates intracellular calcium levels in dissociated rat brain cells**

Author(s): Brownson DM; Mabry TJ (REPRINT) ; Leslie SW

Corporate Source: Univ Texas,Sch Biol Sci, Dept Bot,Austin//TX/78712 (REPRINT); Univ Texas,Sch Biol Sci, Dept Bot,Austin//TX/78712; Univ Texas,Coll Pharm, Div Pharmacol & Toxicol,Austin//TX/78712; Univ Texas,Inst Neurosci,Austin//TX/78712

Journal: JOURNAL OF ETHNOPHARMACOLOGY, 2002, V82, N2-3 (OCT), P159-167

ISSN: 0378-8741 Publication date: 20021000

Publisher: ELSEVIER SCI IRELAND LTD, CUSTOMER RELATIONS MANAGER, BAY 15,

SHANNON INDUSTRIAL ESTATE CO, CLARE, IRELAND

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

**Title: The cycad neurotoxic amino acid, beta-N-methylamino-L-alanine (BMAA), elevates intracellular calcium levels in dissociated...**

Abstract: Seeds of the Guam **cycad** *Cycas micronesica* K.D. Hill (Cycadaceae), which contain beta-methylamino-L-alanine (BMAA), have been...

...on Irian Jaya and the Kii Peninsula of Japan, and in all three areas the

**cycad** seeds are used either dietarily or medically. ALS-PDC is a complex of amyotrophic lateral...

...cells can lead to cell death and neurodiseases. Therefore, we evaluated

the ability of the **cycad** toxin BMAA to elevate the intracellular calcium concentration ([Ca<sup>2+</sup>](i)) in dissociated newborn rat brain...

...Ca<sup>2+</sup> levels, these results suggest the involvement of a product of BMAA

and CO<sub>2</sub>, namely a **beta** -carbamate, which has a structure similar to other excitatory amino acids (EAA) such as glutamate...

8/3,K/9 (Item 2 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

07957348 Genuine Article#: 229DL No. References: 38

**Title: Toxic neuronal apoptosis and modifications of tau and APP gene and protein expressions**

Author(s): Hugon J (REPRINT) ; Esclaire F; Lesort M; Kisby G; Spencer P

Corporate Source: UNIV LIMOGES, FAC MED, DEPT HISTOL & CELL BIOL, 2 RUE  
DR

MARCLAND/F-87025 LIMOGES//FRANCE/ (REPRINT); OREGON HLTH SCI  
UNIV,CTR

RES OCCUPAT & ENVIRONM TOXICOL/PORTLAND//OR/97201  
Journal: DRUG METABOLISM REVIEWS, 1999, V31, N3, P635-647  
ISSN: 0360-2532 Publication date: 19990000  
Publisher: MARCEL DEKKER INC, 270 MADISON AVE, NEW YORK, NY 10016  
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

**Title: Toxic neuronal apoptosis and modifications of tau and APP gene  
and**

**protein expressions**

...Abstract: linking the induction of experimental neuronal apoptosis  
in

vitro and the molecular pathology of the **tau** protein and amyloid  
precursor protein (APP). In cultures exposed to mild glutamate  
toxicity, **tau** mRNA expression, not beta-actin, is enhanced in  
stressed neurons. The Guam **cycad** toxin metabolite

methylazoxymethanol

also produces an increase of **tau** gene transcription that  
exacerbates changes induced by glutamate. In serumdeprived cultures  
or

glutamate-exposed cultures, neurons committed to apoptosis have a  
reduced **tau** gene expression, whereas resistant neurons  
display a stable or even augmented **tau** mRNA expression

accompanied by

a persistent **tau** phosphorylation near serine 202. In the same  
conditions, stressed neurons produce membrane blebbings strongly  
immunopositive...

...fragments that are subsequently released in the extracellular space.

Experimental apoptosis in neurons can recapitulate **tau** and APP  
modifications that could be associated with a selective

vulnerability

and a progression of...

**8/3,K/10 (Item 1 from file: 71)**

DIALOG(R)File 71:ELSEVIER BIOBASE

(c) 2004 Elsevier Science B.V. All rts. reserv.

01216181 1999190608

**Damage and repair of nerve cell DNA in toxic stress**

Kisby G.E.; Kabel H.; Hugon J.; Spencer P.

ADDRESS: G.E. Kisby, Res. on Occup./Envntl. Toxicol. Ctr., School of  
Medicine, Oregon Health Sciences University, 3181 S.W. Sam  
Jackson

Park Road, Portland, OR 97201, United States

EMAIL: kisby@ohsu.edu

Journal: Drug Metabolism Reviews, 31/3 (589-618), 1999, United States

CODEN: DMTRA

ISSN: 0360-2532

DOCUMENT TYPE: Conference Paper

LANGUAGES: English SUMMARY LANGUAGES: English

NO. OF REFERENCES: 149

...Guam, Irian Jaya, Indonesia, and the Kii Peninsula of Japan). A strong candidate is the **cycad** plant genotoxin cycasin, the beta-D-glucoside of methylazoxymethanol (MAM). We propose that prenatal or...

...in the presence of DNA damage and reduced DNA repair, enhances glutamate-modulated expression of **tau** mRNA in rat primary neurons; the corresponding protein ( **TAU** ) is elevated in ALS/PDC and Alzheimer's disease. These findings support a direct relationship...

8/3,K/11 (Item 1 from file: 164)  
DIALOG(R)File 164:Allied & Complementary Medicine  
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**The cycad neurotoxic amino acid, ss-N-methylamino-L-alanine (BMAA), elevates intracellular calcium levels in dissociated rat brain cells**

Brownson D; Mabry T; Leslie S

J Ethnopharmacol , VOLUME: 82, ISSUE: 2-3, PAGE: 159-67  
2002

DOCUMENT TYPE: Journal Article LANGUAGE: English RECORD TYPE:  
Abstract

DESCRIPTORS - Key Word : CALCIUM; BRAIN; PLANT EXTRACTS; AMYOTROPHIC  
LATERAL SCLEROSIS; PARKINSON DIS; DEMENTIA;  
SEEDS; METABOLISM; ADVERSE EFFECTS;

ETIOLOGY;

ASIA SOUTHEASTERN; PLANTS MEDICINAL

IDENTIFIERS - Entry Term: Cycas micronesica

**The cycad neurotoxic amino acid, ss-N-methylamino-L-alanine (BMAA), elevates intracellular calcium levels in dissociated...**

ABSTRACT: Seeds of the Guam **cycad** Cycas micronesica K.D. Hill (Cycadaceae), which contain beta-methylamino-L-alanine (BMAA), have been...

...on Irian Jaya and the Kii Peninsula of Japan, and in all three areas the

**cycad** seeds are used either dietarily or medically. ALS-PDC is a complex of amyotrophic lateral...

... cells can lead to cell death and neurodiseases. Therefore, we evaluated the ability of the **cycad** toxin BMAA to elevate the intracellular calcium concentration ((Ca(2+))(i)) in dissociated newborn rat...

... levels, these results suggest the involvement of a product of BMAA and CO(2), namely a **beta** -carbamate, which has a structure similar to



other  
excitatory amino acids (EAA) such as glutamate...  
? ds

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S3	169624	A()BETA OR A-BETA
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S5	2071	CYCAD
S6	2143	S5 OR S1
S7	42	S6 AND S4
S8	11	RD (unique items)